

What is claimed is:

1. A line start reluctance synchronous motor comprising:
a single phase stator arranged at an inner circumferential surface of a
5 motor body and on which a main coil and a sub coil are wound;
a magnet unit free-rotatably arranged along an inner circumferential
surface of the stator in order to maintain an air gap with the stator; and
a cage rotor provided with a rotation shaft at a center portion thereof to be
rotatable along an inner circumferential surface of the magnet unit, provided with a
10 cage bar at a peripheral portion thereof, and provided with magnetic barriers
having the same pole numbers as the magnet unit.
2. The line start reluctance synchronous motor of claim 1, wherein
the magnetic barriers are formed with a certain interval at an outer side surface of
15 the cage rotor.
3. The line start reluctance synchronous motor of claim 2, wherein a
salient is formed between the magnetic barriers.
- 20 4. The line start reluctance synchronous motor of claim 1, wherein
the magnetic barriers are formed with a certain interval at an inner side surface of
the cage rotor.
5. The line start reluctance synchronous motor of claim 4, wherein
25 the magnetic barriers are formed as a circular arc shape.

6. The line start reluctance synchronous motor of claim 5, wherein the magnetic barriers become larger towards a circumferential direction of the cage rotor.

5 7. A line start reluctance synchronous motor comprising:
a single phase stator arranged at an inner circumferential surface of a motor body and on which a main coil and a sub coil are wound;
a magnet unit free-rotatably arranged along an inner circumferential surface of the stator in order to maintain an air gap with the stator; and
10 a cage rotor provided with a rotation shaft at a center portion thereof to be rotatable along an inner circumferential surface of the magnet unit, provided with a cage bar at a peripheral portion thereof, and provided with magnetic barriers having the same pole numbers as the magnet unit at an outer circumferential surface and an inner side surface thereof.

15 8. The line start reluctance synchronous motor of claim 7, wherein the magnetic barriers are formed as a circular arc shape.

9. The line start reluctance synchronous motor of claim 7, wherein
20 the magnetic barriers become larger towards a circumferential direction of the cage rotor.